

## SE97 RDD Valuation Survey Overview

Fishery managers are required by law to report the economic consequences of their decisions regarding the allocations of limited fish resources between commercial and recreational fishing sectors. High quality economic data are needed to evaluate the economic claims of constituents and to resolve potential political conflicts between the commercial and recreational fishing constituents as they compete for the limited fish resources. However, fishery managers do not currently have access to much economic information about recreational fisheries. This study intends to help fill the data and research gaps in our knowledge of the economics of marine recreational fishing.

Our objectives, broadly characterized, are twofold. The first is to collect social and economic data on the people who participate in marine recreational fishing in the various regions of the continental United States. Second, these data will be used to estimate statistical models of the demand for marine recreational fishing for seven to nine regionally selected species that are highly sought by marine recreational anglers and are either currently managed by the Fishery Management Councils and/or the Interstate Marine Fisheries Commissions, or are expected to come under management in the near future. For example, the 1994 Supplemental Economic Survey conducted in the Northeast Region as an add-on to the Marine Recreational Fisheries Statistics Survey (MRFSS) asked about bluefish, striped bass, summer flounder, Atlantic cod, black sea bass, tautog, scup, and weakfish (scup was targeted in the North Atlantic and weakfish in the Middle Atlantic).

The species-specific demand models (travel cost models and random utility models) will be specified to begin to answer questions about the economic value of or costs of two common forms of regulations imposed on anglers: (1) participation and access and (2) changes in catch (e.g., creel limits, catch and release, minimum size). In keeping with the state of the art in recreational demand modeling, the demand models will be estimated as being contingent on the choice to go marine recreational fishing and the choice of target species. This study will not estimate economic impact statistics, including multiplier effects for regional income or employment. Although, some of the data we collect could be used by others for this purpose (particularly data on anglers' expenditures), credible regional economic impact analysis requires an entirely different survey methodology. The focus of this large scale data collection and research project will be on the economic valuation of marine recreational fishing and catches by anglers.

### Add-On Economics Telephone Survey Instrument

Individuals at least 16 years of age are eligible to respond to the add-on telephone survey. We believe responses from individuals less than 16 years old will not be valid and reliable within the objectives of the study. In addition, because of the personalized nature of some of the questions, proxy respondent-based reporting will not be allowed. It is understood that proxy respondents generally range from 15 to 20 percent of the total sample of 2-month fishing households. Further sampling controls based on gender will not be needed.

Households responding to the MRFSS Telephone Survey shall be categorized according to how recently residents of that household fished in salt water. Categories are defined as follows:

- |             |   |
|-------------|---|
| Category 1: | no household residents ever go saltwater sport fishing;   |
| Category 2: | one or more household residents have previously fished recreationally in saltwater, but none have done so in the last 12 months;                |
| Category 3: | one or more household residents have fished recreationally in saltwater in the last 12 months but none of them fished within the last 2 months; |
| Category 4: | one or more household residents have fished recreationally in saltwater in the last two months.   |

### General Procedures

The economic add-on telephone survey will be administered to 2-month saltwater anglers, saltwater anglers who have fished in the last 12 months but not in the last 2 months and anglers who have fished before but

not in the last 12 months. Respondents at least 16 years of age are eligible to complete the survey. If an individual is under the age of 16 or an interviewer is unable to determine the age, then terminate and thank respondent.

The survey design calls for interviewing household members who would not be surveyed within the usual MRFSS telephone survey. As described above, there are four categories of respondents, although there are only two questionnaire versions.

### **Category 1**

If the initial respondent answers negatively to the question "Does anyone in this house go saltwater sport fishing?", the interview is to be terminated.

### **Categories 2 and 3**

If the initial respondent indicates there are saltwater anglers in the household but no one fished in the last two months, the interviewer will attempt to interview one of those anglers. If the respondent who first answered the call is an angler, only that respondent will be interviewed. If the initial respondent is not an angler, the interviewer will ask to speak with one of the anglers. If no angler is immediately available, no one should be administered the economic questionnaire, the interview should be terminated, and no call back should be made. If an angler is available at the time of the initial MRFSS call, version A of the Economic Questionnaire should be administered. Only one angler per household should be interviewed. Category 2 anglers are those who have not fished in the last year. Category 3 anglers are those who have fished in the last year but not in the last two months.

### **Category 4**

This category is 2-month saltwater anglers who are administered the routine MRFSS interview about fishing trips. Version B of the Economic Questionnaire is to be administered to **all** MRFSS respondents. The Economic Questionnaire is **not** to be administered when obtaining proxy information.

## **Telephone Survey Instrument**

### **Version A**

Interviewer should only ask these questions of category 2 and 3 respondents. Version A is composed of two parts: (1) a Screening Questionnaire, and (2) an Economic Questionnaire. Part I determines if the initial telephone respondent is a saltwater angler and can be administered the Economic Questionnaire. If the initial respondent is not eligible, the interviewer requests to speak to an angler and when successful, introduces the survey to the angler and begins Part II. Part II elicits demographic and economic information from the respondent.

### **Version B**

Interviewers will ask these questions of those individuals who fished in saltwater in the last two months (routine MRFSS trip questionnaire respondents). Question 1 shall be asked for each trip, following the MRFSS question that determines the mode of the trip. All other questions will be asked at the end of the survey.

## **Interview Justification**

At the present time, no information on inactive anglers i.e., those who did not fish during the two-month period prior to the interview, is collected by the base survey instruments. This telephone survey is designed to develop an understanding about the social and demographic characteristics of active and non-active fishing households and to determine some of the reasons individuals do and don't fish. This information

also allows us to determine whether samples drawn from the two active groups (intercept sample and phone sample) are drawn from the same group.

### **Data Sets**

Data sets can be obtained by contacting the National Marine Fisheries Service, Science and Technology division.

# Administrative Statistics

Disposition of Identified Anglers												
1997	Anglers Interviewed Personally		Proxy Anglers		Children, Language Barrier		Anglers Who Refused Trip Information		Anglers Unable to be Contacted or Profiled		Total	
South Atlantic	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Wave I	396	57.4	218	31.6	0	0.0	37	5.4	39	5.7	690	100.1
Wave II	819	58.8	426	30.6	5	0.4	51	3.7	92	6.6	1393	100.1
Wave III	1355	54.2	873	34.9	14	0.6	89	3.6	169	6.8	2500	100.1
Wave IV	1374	53.5	907	35.3	16	0.6	94	3.7	177	6.9	2568	100.0
Wave V	1340	57.2	771	32.9	8	0.3	99	4.2	123	5.3	2341	99.9
Wave VI	856	58.2	460	31.3	8	0.5	40	2.7	107	7.3	1471	100.0
Gulf Region	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Wave I	691	58.7	357	30.3	2	0.2	41	3.5	86	7.3	1177	100.0
Wave II	1140	58.5	607	31.1	8	0.4	63	3.2	132	6.8	1950	100.0
Wave III	1576	55.0	1006	35.1	13	0.5	85	3.0	188	6.6	2868	100.2
Wave IV	1428	52.0	1009	36.7	16	0.6	96	3.5	198	7.2	2747	100.0
Wave V	1325	55.4	837	35.0	13	0.5	99	4.1	117	4.9	2391	99.9
Wave VI	775	57.9	412	30.8	7	0.5	42	3.1	103	7.7	1339	100.0
South Atlantic	6140	56.0	3655	33.3	51	0.5	410	3.7	707	6.4	10963	100.0
Gulf Region	6935	55.6	4228	33.9	59	0.5	426	3.4	824	6.6	12472	100.0
South East	13075	55.8	7883	33.6	110	0.5	836	3.6	1531	6.5	23435	100.0

Dialing Results for Contacts																
1997	Refused to Answer 12 Month Question		No Fishing in the Past 12 Months		Could not Answer 2 Month Question		Refused to Answer 2 Month Question		No Fishing in the Last 2 Months		First Time Contact/ Non-fishing Households		Fishing Household		Total	
South Atlantic	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Wave I	0	0.0	5461	85.0	0	0.0	0	0.0	518	8.1	36	0.6	409	6.4	6424	100.1
Wave II	0	0.0	10338	84.0	0	0.0	0	0.0	1030	8.4	102	0.8	841	6.8	12311	100.0
Wave III	0	0.0	13982	84.0	0	0.0	0	0.0	1132	6.8	108	0.6	1426	8.6	16648	100.0
Wave IV	0	0.0	15082	85.4	0	0.0	0	0.0	1011	5.7	110	0.6	1456	8.2	17659	99.9
Wave V	0	0.0	13876	83.9	0	0.0	0	0.0	1153	7.0	96	0.6	1404	8.5	16529	100.0
Wave VI	0	0.0	10773	82.8	0	0.0	0	0.0	1250	9.6	93	0.7	901	6.9	13017	100.0
Gulf Region	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Wave I	0	0.0	7917	81.1	0	0.0	0	0.0	1064	10.9	65	0.7	718	7.4	9764	100.1
Wave II	0	0.0	9772	81.2	0	0.0	0	0.0	1056	8.8	80	0.7	1131	9.4	12039	100.1
Wave III	0	0.0	12076	81.1	0	0.0	0	0.0	1082	7.3	88	0.6	1642	11.0	14888	100.0
Wave IV	0	0.0	11974	82.7	0	0.0	0	0.0	931	6.4	81	0.6	1498	10.3	14484	100.0
Wave V	0	0.0	11636	81.5	0	0.0	0	0.0	1166	8.2	83	0.6	1390	9.7	14275	100.0
Wave VI	0	0.0	7892	80.9	0	0.0	0	0.0	986	10.1	67	0.7	806	8.3	9751	100.0
South Atlantic	0	0.0	69512	84.2	0	0.0	0	0.0	6094	7.4	545	0.7	6437	7.8	82588	100.0
Gulf Region	0	0.0	61267	81.5	0	0.0	0	0.0	6285	8.4	464	0.6	7185	9.6	75201	100.0
South East	0	0.0	130779	82.9	0	0.0	0	0.0	12379	7.8	1009	0.6	13622	8.6	157789	100.0